

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results



ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Judy Smetzer, BSN, RN, FISMP

Vice President, Institute for Safe Medication Practices

Susan Paparella, MSN, RN

Vice President, Institute for Safe Medication Practices

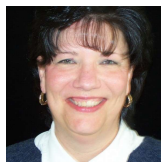
Rebecca Lamis, PharmD, FISMP

Medication Safety Analyst, Institute for Safe Medication Practices

©2021 ISMP | www.ismp.org | 1

1

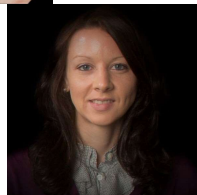
Meet Our Faculty



Judy Smetzer, BSN, RN, FISMP
Vice President, ISMP



Susan Paparella, MSN, RN
Vice President, ISMP



Rebecca Lamis, Pharm D, FISMP
Medication Safety Analyst, ISMP



©2021 ISMP | www.ismp.org | 2

2

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Disclosure

Rebecca Lamis, Judy Smetzer, and Susan Paparella declare no conflicts of interest, real or apparent, and no financial interest in any product or service mentioned in this program.



©2021 ISMP | www.ismp.org | 3

3

Learning Objectives

Following completion of this activity, participants will be able to:

1. State how participation in the ISMP Medication Safety Self Assessment® for Perioperative Settings will benefit healthcare organizations.
2. Describe how to complete the assessment, submit the results to ISMP anonymously, and use available reports to identify, prioritize, and guide improvements.
3. Outline the steps recommended for full engagement in the assessment process to ensure the most useful results.

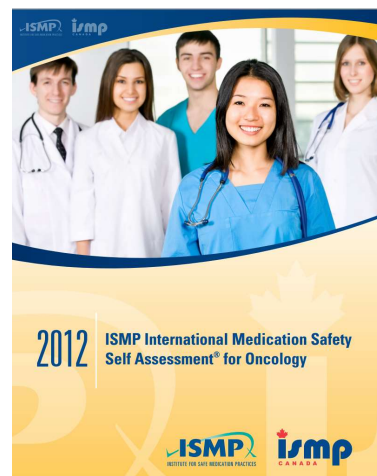
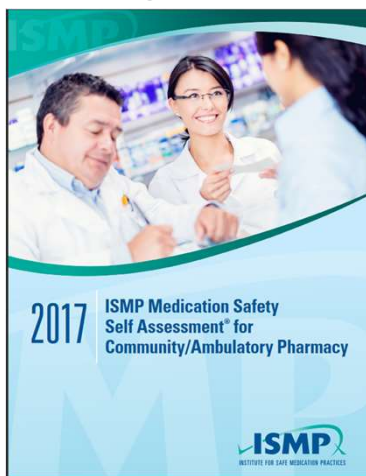


©2021 ISMP | www.ismp.org | 4

4

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Tools and Resources: ISMP Medication Safety Self Assessment®



<https://www.ismp.org/self-assessments>

©2021 ISMP | www.ismp.org | 5

5

Why Focus on Perioperative Services?

- High-risk setting; fast-paced, involving multiple individuals and handoffs
- Medication-related events occur in all phases of the perioperative process
 - 1 observed medication error in half of all surgical procedures⁵
 - 1 self-reported event in every 1,285 procedures⁶
 - 1 event in every 20 medication administrations; more than 1/3rd led to patient harm⁵
 - Occurs in at least 1 of every 133 doses administered during anesthesia^{7,8}
- Continued public health issue²⁻⁴
- Hear from providers that the safety rules are different than in the rest of the organization; this area is under-represented in event reporting



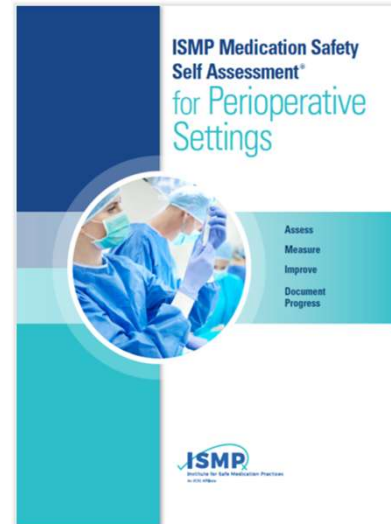
©2021 ISMP | www.ismp.org | 6

6

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Benefits to Organizations

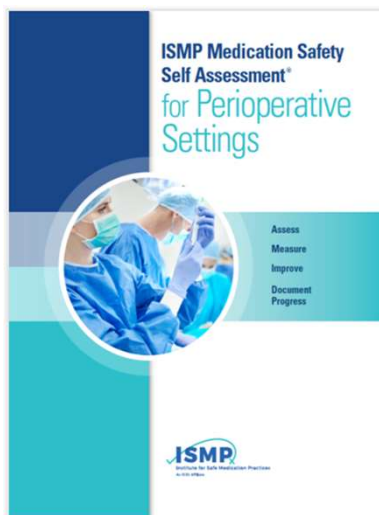
- Provide a standardized way for organizations to assess the safety of systems and practices associated with medication use in any phase of perioperative care
- Heighten awareness of best practices
- Compare their results with demographically similar organizations
- Create organization-specific, safety focused initiatives



©2021 ISMP | www.ismp.org | 7

7

National Benefits



- Create a baseline of national efforts
- Pinpoint how currently designed systems, staff practices, and emerging challenges may impact perioperative medication safety
- Determine challenges many healthcare providers face in keeping patients safe during all perioperative phases of care
- Develop tools/resources associated with preventing harm from medication use

©2021 ISMP | www.ismp.org | 8

8

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Advisory Group

- Julie Boytim, DNP, CRNA
- Mary Burkhardt, MS, RPh, FASHP, FSMSO
- Byron Burlingame, MS, BSN, RN, CNOR, DHC, FRCSEd, MBA, MPH,
- T. Forcht Dagi, MD, DMedSc, DHC, FRCSEd, MBA, MPH, FAANS, FACS, FCCM, BCPS
- Rosemary Duncan, PharmD, BCPS
- Eliot Grigg, MD
- Gail Horvath, MSN, RN, CNOR, CRCST
- Joshua Lea, DNP, MBA, CRNA
- Ronald Litman, DO, ML
- Lauren M. Y. Lobaugh, MD, MAS, FAAP
- Tricia Meyer, PharmD, MS, FASHP, FTSHP, BSN, RN, CASC
- Ann Shimek, MSN, BSN, RN, CASC
- Sheldon S. Sones, RPh, FASCP, BS Pharm, FASHP
- Deborah Wagner, PharmD, FASHP
- Rachel Stratman Wolfe, PharmD, MHA, BCCCP
- Nicole Yin, PharmD



©2021 ISMP | www.ismp.org | 9

9

Endorsing Organizations

- American Association for Accreditation of Ambulatory Surgery Facilities (AAAASF)
- American Association of Nurse Anesthetists (AANA)
- American College of Clinical Pharmacy (ACCP) Perioperative Care Practice and Research Network (PRN)
- American Society for Health Care Risk Management (ASHRM)
- American Society of Health-System Pharmacists (ASHP)
- American Society of PeriAnesthesia Nurses (ASPAN)
- Anesthesia Patient Safety Foundation (APSF)
- Association of periOperative Registered Nurses (AORN)
- Children's Hospitals' Solutions for Patient Safety (SPS)
- ECRI
- Infusion Nurses Society (INS)
- Institute for Healthcare Improvement (IHI)
- National Association for Healthcare Quality (NAHQ)
- Pediatric Pharmacy Association (PPA)
- The Joint Commission (TJC)



©2021 ISMP | www.ismp.org | 10

10

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Who should participate?

- US hospitals that perform inpatient and/or outpatient medical and/or surgical procedures
- Freestanding US ambulatory surgery centers, including those dedicated to gastrointestinal/endoscopy procedures
- Other US facilities that perform outpatient medical and/or surgical procedures



©2021 ISMP | www.ismp.org | 11

11

Scope

— Included

- Perioperative and procedural processes, staff, equipment, technology, environment of care, and/or medications associated with **medical and/or surgical procedures** and the patients who undergo them
- **Medical and/or surgical procedure** is defined as any procedure performed on a patient by a licensed healthcare practitioner that requires moderate sedation, deep sedation, monitored anesthesia care (MAC), regional anesthesia, and/or general anesthesia, including diagnostic and invasive procedures that meet this definition

— Excluded

- Procedures that require *minimal sedation*
- The care of patients after they are discharged from the facility or transferred out of the perioperative setting, usually to an inpatient hospital bed



©2021 ISMP | www.ismp.org | 12

12

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Assessment Items

- Selected items based on the types of errors and safety risks identified in these settings
- Critical safe medication systems and practices
- Evidence-based items and expert opinion
- Extends beyond minimum standards of practice



©2021 ISMP | www.ismp.org | 13

13

ISMP's Key Elements of the Medication Use System™

Contents	
Invitation to Participate	3
Funding Source, PIA Burden Statement, and Security of Information	4
Purpose, Audience, and Scope	5
Acknowledgements	6
Endorsing Organizations	7
Key Definitions	8
Key Abbreviations and Frequently Asked Questions	9
Instructions for Conducting the Self Assessment	10
Instructions for Entering and Submitting Information to ISMP	13
Demographics	16
(20 questions for hospitals (pages 16-25), 19 questions for freestanding ambulatory facilities (pages 26-32))	
Key Element I: Patient Information	33
(1 Core Characteristics, 26 assessment items)	
Key Element II: Drug Information	37
(1 Core Characteristics, 18 assessment items)	
Key Element III: Communication of Drug Orders and Other Drug Information	40
(1 Core Characteristics, 21 assessment items)	
Key Element IV: Drug Labeling, Packaging, and Nomenclature	45
(2 Core Characteristics, 22 assessment items)	
Key Element V: Drug Standardization, Storage, and Distribution	49
(4 Core Characteristics, 47 assessment items)	
Key Element VI: Medication Delivery Device Acquisition, Use, and Monitoring	58
(1 Core Characteristics, 16 assessment items)	
Key Element VII: Environmental Factors, Workflow, and Staffing Patterns	61
(2 Core Characteristics, 17 assessment items)	
Key Element VIII: Staff Competency and Education	63
(1 Core Characteristics, 8 assessment items)	
Key Element IX: Patient Education	65
(1 Core Characteristics, 8 assessment items)	
Key Element X: Quality Processes and Risk Management	67
(4 Core Characteristics, 42 assessment items)	
Glossary	73
About the Institute for Safe Medication Practices (ISMP)	79
Logos of Endorsing Organizations	80

- I. Patient Information
- II. Drug Information
- III. Communication of Drug Orders and Other Drug Information
- IV. Drug Labeling, Packaging, and Nomenclature
- V. Drug Standardization, Storage, and Distribution
- VI. Medication Delivery Device Acquisition, Use, and Monitoring
- VII. Environmental Factors, Workflow, and Staffing Patterns
- VIII. Staff Competency and Education
- IX. Patient Education
- X. Quality Processes and Risk Management



©2021 ISMP | www.ismp.org | 14

14

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Highlighted Terms Used

- Additional defined terms can be found in the **Glossary (pages 73-78)** and are designated throughout the text in **BOLD, SMALL CAPITAL LETTERS**
- In the online version of the assessment, glossary terms are linked to their definitions when they appear in demographic questions or self-assessment items

5. Adverse drug reactions distinguished as either allergies or **DRUG INTOLERANCES**, along with the specific reactions (if known) to each, are collected and/or verified with each patient **before** the medical and/or surgical procedure, **and** are listed in a standardized, clearly visible location in the patient's EHR or medical record, preoperative or preprocedure checklists, anesthesia record, and order screens/forms.

Choose one

☐ A. There has been no activity to implement this item.

☐ B. This item has been formally discussed and considered, but it has not been implemented.

☐ C. This item has been partially implemented for some or all patients, orders, drugs, or staff.

☒ D. This item is fully implemented for some patients, orders, drugs, or staff.

☐ E. This item is fully implemented for all patients, orders, drugs, or staff.

An adverse drug reaction characterized as a side effect (undesirable effect at recommended doses), intolerance (low tolerance to an adverse effect), idiosyncrasy (genetically determined, abnormal reaction to a drug), or toxicity (toxic reactions linked to a high dose and/or impaired excretion), rather than a true drug allergy.



©2021 ISMP | www.ismp.org | 15

15

Scoring Key



Self-Assessment Items

A	There has been no activity to implement this item.
B	This item has been formally discussed and considered, but it has not been implemented.
C	This item has been partially implemented for some or all patients, orders, drugs, or staff.
D	This item is fully implemented for some patients, orders, drugs, or staff.
E	This item is fully implemented for all patients, orders, drugs, or staff.

Key Element I: Patient Information

		A	B	C	D	E
Core Characteristic # 1						
Essential patient information is obtained, readily available in useful form, and considered when prescribing, dispensing, and administering perioperative medications, and when monitoring the effects of these medications.						
1	A computer-generated identification bracelet is verified for correctness using two unique patient identifiers and placed on the patient prior to medication adminis-					
Not Applicable						



©2021 ISMP | www.ismp.org | 16

16

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

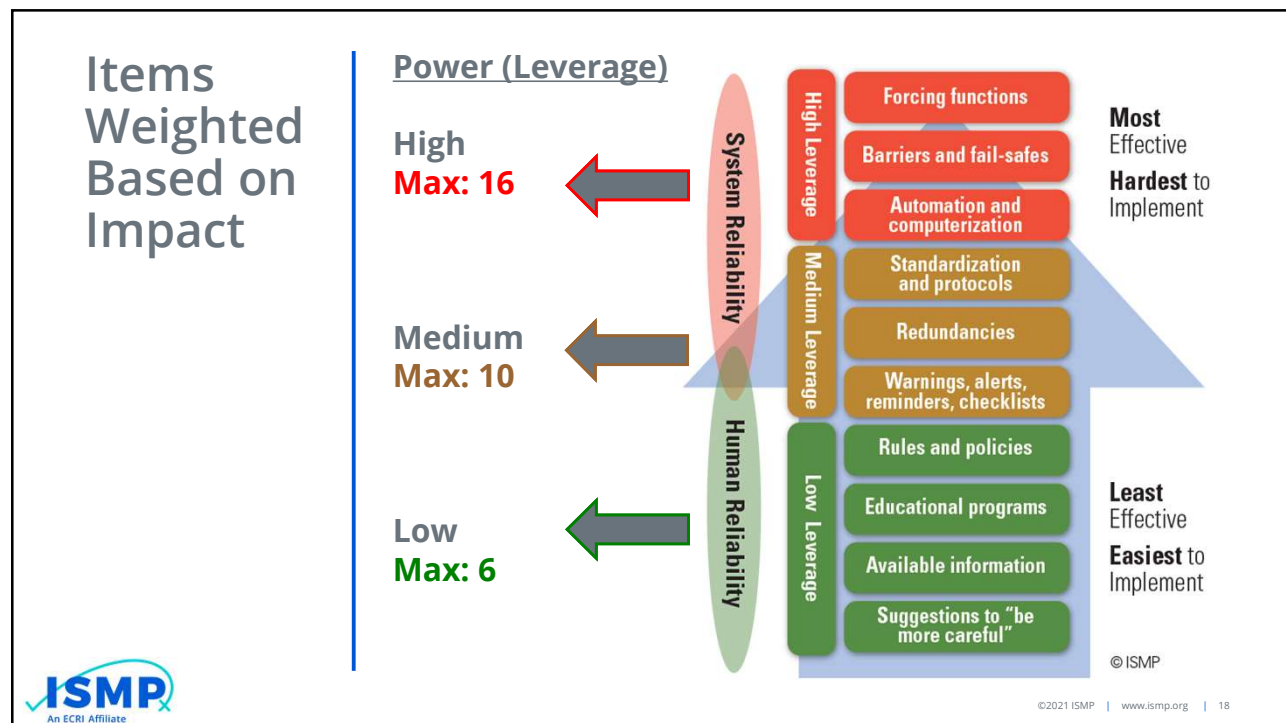
Weighted Scores

- Based on impact to patient safety and ability to sustain improvement
- Lowest score: 0; Highest score: 16
- Some with no numerical score unless there is partial or full implementation; some receive no numerical score without full implementation throughout the facility
- N/A choices have been assigned weighted scores, based on the degree of risk avoided
- Scores not viewable during the assessment



©2021 ISMP | www.ismp.org | 17

17




©2021 ISMP | www.ismp.org | 18

18

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Frequently Asked Questions



ISMP Medication Safety Self Assessment for Perioperative Settings

Frequently Asked Questions (FAQs)

ISMP
Institute for Safe Medication Practices

Key Element I: Patient Information - Core Characteristic # 1

4. Medications taken at home (or in the hospital) by the patient before the medical and/or surgical procedure are reconciled with the list of medications prescribed at the time of admission/encounter and upon transfer within the facility (e.g., from the POST-ANESTHESIA CARE UNIT to an inpatient unit) or at discharge after outpatient surgery; and any identified discrepancies (e.g., omissions, duplications, contraindications, unclear information) are resolved. FAQ

Choose one

- ☐ A. There has been no activity to implement this item.
- ☐ B. This item has been formally discussed and considered, but it has not been implemented.
- ☐ C. This item has been partially implemented for some or all patients, orders, drugs, or staff.
- ☐ D. This item is fully implemented for some patients, orders, drugs, or staff.
- ☐ E. This item is fully implemented for all patients, orders, drugs, or staff.

Back Save and continue

FAQ 4

Medications taken at home (or in the hospital) by the patient before the medical and/or surgical procedure are reconciled with the list of medications prescribed at the time of admission/encounter and upon transfer within the facility (e.g., from the POST-ANESTHESIA CARE UNIT to an inpatient unit) or at discharge after outpatient surgery; and any identified discrepancies (e.g., omissions, duplications, contraindications, unclear information) are resolved.

©2021 ISMP | www.ismp.org | 19

19

Demographic Questions

- **Hospitals:** 20 questions
- **Freestanding ambulatory facilities:** 19 questions
- **Types of questions include:**
 - bed size or patient visits
 - urban/rural; location
 - ownership; part of healthcare system
 - patient population served; primary type of service
 - training programs
 - number of operating/procedure rooms
 - number and types of procedures performed
 - anesthesia and pharmacy services
 - where anesthesia personnel obtain medications from
 - available technology



ISMP
An ECRI Affiliate

Demographics

All questions in the demographics section must be completed.

Please select the app category that best describes the facility completing this assessment.

☐ Hospital that performs inpatient and/or outpatient medical and/or surgical procedures

☐ Freestanding ASC not physically connected to a hospital, irrespective of ownership and licensure, including freestanding ASCs dedicated to specialty procedures (e.g., gastroenterology/endoscopy procedures, interventional radiology, ophthalmic procedures, pain management procedures, fertility procedures)

☐ Other facility that performs outpatient medical and/or surgical procedures (please specify): _____

For hospitals, please complete the General Demographics for Hospitals.

For freestanding ASCs and other outpatient facilities that perform medical and/or surgical procedures, please complete the General Demographics for Freestanding Ambulatory Facilities.

It is important for each facility within a multifacility system to complete the self assessment individually. FAQ

See the Glossary starting on page 72 for defined terms (designated in bold, small caps, letters, etc.).

☒ General Demographics for Hospitals

About the Hospital

1) Please select the app category that best describes the number of inpatient beds currently staffed for use in your hospital, based on the average inpatient census.

☐ Up to 25 beds

☐ Is your hospital a critical access hospital (CAH)? Please see the following for criteria that must be met for a hospital to be designated as a CAH: www.cms.gov/cah/

☐ Yes

☐ No

☐ 26 to 99 beds

☐ 100 to 299 beds

☐ 300 to 499 beds

☐ 500 beds and over

2) Please select the app category that best describes the location of your hospital (based on the US Census Bureau and Office of Management and Budget classifications).

☐ Urban (urbanized, metropolitan area with a total population of 50,000 people or more)

☐ Rural (nonmetropolitan, urban cluster, or rural area with a total population of fewer than 50,000 people)

continued on page 17 >

© 2021 ISMP Medication Safety Self Assessment for Perioperative Settings

©2021 ISMP | www.ismp.org | 20

20

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Key Element I: Patient Information

— 1 Core Characteristic: 25 items (Core #1)

— Topics addressed include:

- patient identification bracelet
- medication reconciliation
- patient allergies/drug intolerances (documented; screened)
- opioid status (naïve vs. tolerant) (documented; used to plan therapy)
- patient weight (metric only; accurate/measured)
- patient selection criteria for PCA/PCEA
- monitoring (pulse oximetry, capnography, sedation, pain, vital signs)

— Example item:

- **Item #11:** On the day of the procedure, patient weights measured only in *metric* units (i.e., grams or kilograms) are obtained for all patients undergoing a medical and/or surgical procedure.



Self-Assessment Items

Key Element I: Patient Information

Core Characteristic #1

Essential patient information is obtained, readily available in useful form, and consistent when prescribing, dispensing, and administering peroperative medications, and when monitoring the effects of these medications.

Item	Item Description	Yes	No	Not Applicable
1	A complete, current medication list, including each prescription and over-the-counter medication, is obtained from the patient or caregiver and verified with the patient's medical record and/or pharmacy records.			
2	A complete, current medication list, including each prescription and over-the-counter medication, is obtained from the patient or caregiver and verified with the patient's medical record and/or pharmacy records.			
3	Medication reconciliation is performed for each patient prior to or upon admission to the hospital, and the results are documented in the medical record.			
4	Medication reconciliation is performed for each patient prior to or upon admission to the hospital, and the results are documented in the medical record.			
5	Medication reconciliation is performed for each patient prior to or upon admission to the hospital, and the results are documented in the medical record.			
6	Medication reconciliation is performed for each patient prior to or upon admission to the hospital, and the results are documented in the medical record.			
7	Medication reconciliation is performed for each patient prior to or upon admission to the hospital, and the results are documented in the medical record.			

©2021 ISMP | www.ismp.org | 21

21

Key Element II: Drug Information

— 1 Core Characteristic: 18 items (Core #2)

— Topics addressed include:

- drug reference materials (free of error-prone abbrev.; updated)
- safe maximum dose limits/ranges (established; followed)
- pre-/postop orders entered into CPOE; verified by pharmacist
- protocol for malignant hyperthermia (current; accessible)
- screening and holding/discontinuing antithrombotic medications
- emergency drug dosing guidelines (easily accessible on cart)
- preference cards (approved; clear; standardized)

— Example item:

- **Item #38:** A protocol for treating malignant hyperthermia, based on current reference material from the Malignant Hyperthermia Association of the United States (MHAUS), is readily accessible, along with the MHAUS hotline (phone number).



Self-Assessment Items

Key Element II: Drug Information

Core Characteristic #2

Essential drug information is readily available in useful form and consistent when prescribing, dispensing, and administering peroperative medications, and when monitoring the effects of these medications.

Item	Item Description	Yes	No	Not Applicable
26	Medication-related reference materials (e.g., commercially available and facility-approved) are readily available in useful form and consistent when prescribing, dispensing, and administering peroperative medications, and when monitoring the effects of these medications.			
27	Medication-related reference materials (e.g., commercially available and facility-approved) are readily available in useful form and consistent when prescribing, dispensing, and administering peroperative medications, and when monitoring the effects of these medications.			
28	Medication-related reference materials (e.g., commercially available and facility-approved) are readily available in useful form and consistent when prescribing, dispensing, and administering peroperative medications, and when monitoring the effects of these medications.			
29	Medication-related reference materials (e.g., commercially available and facility-approved) are readily available in useful form and consistent when prescribing, dispensing, and administering peroperative medications, and when monitoring the effects of these medications.			
30	Medication-related reference materials (e.g., commercially available and facility-approved) are readily available in useful form and consistent when prescribing, dispensing, and administering peroperative medications, and when monitoring the effects of these medications.			
31	Medication-related reference materials (e.g., commercially available and facility-approved) are readily available in useful form and consistent when prescribing, dispensing, and administering peroperative medications, and when monitoring the effects of these medications.			

©2021 ISMP | www.ismp.org | 22

22

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Key Element III: Communication of Drug Orders & Info.

— 1 Core Characteristic: 21 items (Core #3)

— Topics addressed include:

- communication of drug therapy administered intraoperatively
- transfer of care communication; hand-off reports
- verbal orders (when to accept; how to communicate/document)
- standard protocols, guidelines, order sets (PCA/PCEA, IV and neuraxial opioids, neuraxial anesthesia, elastomeric pumps)
- drug diversion (system to deter, detect, investigate)
- dialogue about intimidation; process for conflict resolution

— Example item:

- **Item #49:** Face-to-face verbal orders from prescribers who are onsite in the facility are never accepted, except in emergencies or during sterile procedures where ungloving would be impractical.



©2021 ISMP | www.ismp.org | 23

23

Key Element IV: Drug Labeling, Packaging, & Nomenclature

— 2 Core Characteristics: 22 items (Cores #4-5)

— Topics addressed include:

- similar labels, packaging, drug names (differentiate/separate)
- medication storage in trays, kits, carts, ADCs (label facing up)
- storage of irrigation solutions, tranexamic acid, NMBs, lubricants
- labeling used on medication storage bins, trays, kits, drawers
- use of preprinted labels
- labeling of containers on/off the sterile field

— Example item:

- **Item #71:** Vials of tranexamic acid stocked in ADCs and anesthesia trays, kits, carts, drawers, or other anesthesia storage areas are sequestered or separated from look-alike vials used for regional anesthesia (e.g., bupivacaine, ropivacaine).



©2021 ISMP | www.ismp.org | 24

24

Key Element V: Drug Standardization, Storage, & Distribution

- **Topics addressed include:**

- standard mixtures/concentrations
- use of commercially manufactured/prepared, pharmacy-prepared
- standard storage configurations; separate storage
- availability of antidotes, reversal/rescue agents
- access to certain medications/how medications are stocked
- safe preparation and wasting procedures
- hazardous drugs

- **Item #126:** FentaNYL transdermal patches are not stocked in perioperative unit stock, including ADCs, **and** are not used to treat acute or postoperative pain.

[illegible]

©2021 ISMP | www.ismp.org | 25

Key Element VI: Device Acquisition, Use, & Monitoring

- **Topics addressed include:**

- labeling the line and pump/channel; line tracing
- standardized infusion pumps
- administration sets with yellow-striped tubing for epidurals
- use of smart pumps; hard limits set in the drug library
- administration of loading/bolus doses
- data from smart pumps (reviewed, used for improvement)
- ENFit/oral syringes; NRFit connectors

- **Item #140:** Upper and lower hard limits for medication doses, concentrations, infusion rates, and loading doses and bolus doses have been set in the drug library for smart infusion pump technology used in perioperative settings, including in the operating room and/or procedure room.

[illegible]

©2021 ISMP | www.ismp.org | 26

13

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Key Element VII: Environmental Factors, Workflow, & Staffing

— **2 Core Characteristics:** 11 items (Cores #11-12)

— **Topics addressed include:**

- lighting; adequate space
- functional/audible alarms
- staff scheduling; workload; fatigue
- nurse to patient ratio
- pharmacist involvement (onsite or conducts regular rounds)

— **Example item:**

- **Item #158:** An adjusted case load, delay in procedures, or planned late arrival of a perioperative practitioner due to fatigue from working on call and/or overtime does not result in disciplinary sanction or other punitive action.

Key Element VII: Environmental Factors, Workflow, and Staffing Patterns

Core Characteristic # 11

Medications are prescribed, transcribed, prepared, dispensed, and administered in the perioperative setting within an efficient and safe workflow and in a physical environment that offers adequate space and lighting, and allows practitioners to remain focused on the medication-related activities.

Item	1	2	3	4	5
150					
151					
152					
153					
154					
155					
156					
157					
158					
159					
160					

Scoring: Choose Not Applicable only if your facility does not include an internal pharmacy that serves the perioperative setting (e.g., same day ambulatory surgery center).

Score Each Item Individually

© 2021 ISMP Medication Safety Self Assessment® for Perioperative Settings



©2021 ISMP | www.ismp.org | 27

27

Key Element VIII: Staff Competency & Education

— **2 Core Characteristics:** 11 items (Cores #13-14)

— **Topics addressed include:**

- role-playing/simulations of error-prone conditions
- qualified practitioners to administer deep/moderate sedation
- training on drug effects to prevent dose stacking
- practitioners receive information about risks and strategies
- education about medication delivery devices before use
- hazardous drug education; new drug formulary education

— **Example item:**

- **Item #162:** Role-playing and simulations of perioperative error-prone conditions and adverse events are used as methodologies to orient and educate perioperative staff about medication and patient safety.

Key Element VIII: Staff Competency and Education

Core Characteristic # 13

Perioperative practitioners receive sufficient orientation in the perioperative setting to ensure safe and effective medication administration and to ensure compliance with applicable regulatory requirements.

Item	1	2	3	4	5
161					
162					
163					
164					
165					
166					
167					
168					
169					
170					
171					

Scoring: Choose Not Applicable only if your facility does not include an internal pharmacy that serves the perioperative setting (e.g., same day ambulatory surgery center).

Score Each Item Individually

© 2021 ISMP Medication Safety Self Assessment® for Perioperative Settings



©2021 ISMP | www.ismp.org | 28

28

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Key Element IX: Patient Education

- **1 Core Characteristic:** 8 items (Core #15)
- **Topics addressed include:**
 - educate patients about medications that will give pre-/intra-/postop
 - activation of the PCA/PCEA button
 - provide patients with drug info. during each administration
 - discharge education
 - when to resume previous medications
 - responsible adult to observe/accompany patient post-discharge
- **Example item:**
 - **Item #174:** Patients, caregivers, and visitors are educated about the dangers of any individual other than the patient activating the PCA or PCEA button to deliver a medication dose (i.e., PCA by proxy); **and** a warning label, **"For Patient Use Only,"** appears on the cord or activation button for PCA or PCEA.

Key Element IX: Patient Education

Item	Core Characteristic #15	Score
172	During the preoperative phase of care (e.g., pre-anesthesia testing visit, care in the preoperative area, patient and/or caregiver are educated about the types of medications they may be receiving during, and after the medical and/or surgical procedure (e.g., pre-anesthesia antibiotics, anesthesia, analgesia, sedation, and/or other medications) and are encouraged to ask questions.	
173	During the preoperative phase of care (e.g., pre-anesthesia testing visit, care in the preoperative area, patient and/or caregiver are educated about the types of medications they may be receiving during, and after the medical and/or surgical procedure (e.g., pre-anesthesia antibiotics, anesthesia, analgesia, sedation, and/or other medications) and are encouraged to ask questions.	
174	Patients, caregivers, and visitors are educated about the dangers of any individual other than the patient activating the PCA or PCEA button to deliver a medication dose (i.e., PCA by proxy); and a warning label, "For Patient Use Only," appears on the cord or activation button for PCA or PCEA.	1
175	When discharged home from the perioperative setting after a medical and/or surgical procedure, patients and/or caregivers are provided with verbal and written information at an appropriate reading level and in their preferred language about:	
176	Any newly prescribed preoperative or postoperative medications (e.g., pain medications, antibiotics, important side effects (e.g., impact on grapefruit juice, other medications, and/or other health conditions), and proper disposal of unused medications.	
177	Proper use of any recommended over-the-counter medications (e.g., pain medications, stool softeners).	
178	When discharged home from the perioperative setting after a medical and/or surgical procedure, patients and/or caregivers are provided with verbal and written information at an appropriate reading level and in their preferred language about:	
179	Any newly prescribed preoperative or postoperative medications (e.g., pain medications, antibiotics, important side effects (e.g., impact on grapefruit juice, other medications, and/or other health conditions), and proper disposal of unused medications.	



©2021 ISMP | www.ismp.org | 29

29

Key Element X: Quality Processes & Risk Management

- **4 Core Characteristics:** 42 items (Cores #16-19)
- **Topics addressed include:**
 - Just Culture; WalkRounds, safety huddles
 - error reporting, including close calls and hazards
 - use of external safety alerts/recommendations to address risks
 - review of data/reports to identify problems/risks
 - implementation of high-leverage strategies
 - use of checklists/time-out process; barcoding; double checks
 - infection control practices
- **Example item:**
 - **Item #220:** A bag or bottle of an IV solution or medication infusion (e.g., phenylephrine, insulin) is never prepared and/or used outside the pharmacy as a source of flushes, diluents, or bolus doses for single or multiple patients.

Key Element X: Quality Processes and Risk Management

Item	Core Characteristic #16	Score
180	Patient safety is a fundamental core value in the organization, which is reflected in the organization's mission, vision, and values.	
181	The organization's safety is governed by a formal policy that outlines the organization's commitment to a "Just Culture," culture, culture, culture, and culture.	
182	Perioperative leaders and managers have been educated about establishing and maintaining a "Just Culture."	
183	Any accreditation and outcome measures (e.g., culture survey results) for establishing and maintaining a "Just Culture" are included in perioperative leaders and managers' job descriptions or position statements or medical staff bylaws, if applicable and performance applicable.	
184	Perioperative leaders and managers hold all practitioners equally accountable for the quality of their performance, regardless of their professional discipline, role or position in the organization, experience, and/or financial interests.	
185	Perioperative leaders and managers do not expect to be a "scapegoat" for any individual practicing the perioperative practice, nor do they ignore the same behavior when the behavior is a "good" result and/or a "good" result and/or a "good" result.	
186	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
187	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
188	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
189	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
190	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
191	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
192	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
193	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
194	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
195	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
196	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
197	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
198	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
199	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
200	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
201	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
202	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
203	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
204	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
205	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
206	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
207	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
208	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
209	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
210	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
211	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
212	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
213	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
214	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
215	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
216	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
217	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
218	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
219	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	
220	A bag or bottle of an IV solution or medication infusion (e.g., phenylephrine, insulin) is never prepared and/or used outside the pharmacy as a source of flushes, diluents, or bolus doses for single or multiple patients.	1
221	Perioperative leaders and managers anticipate that practitioners will occasionally engage in "near misses" and discuss work daily for signs of this behavior.	

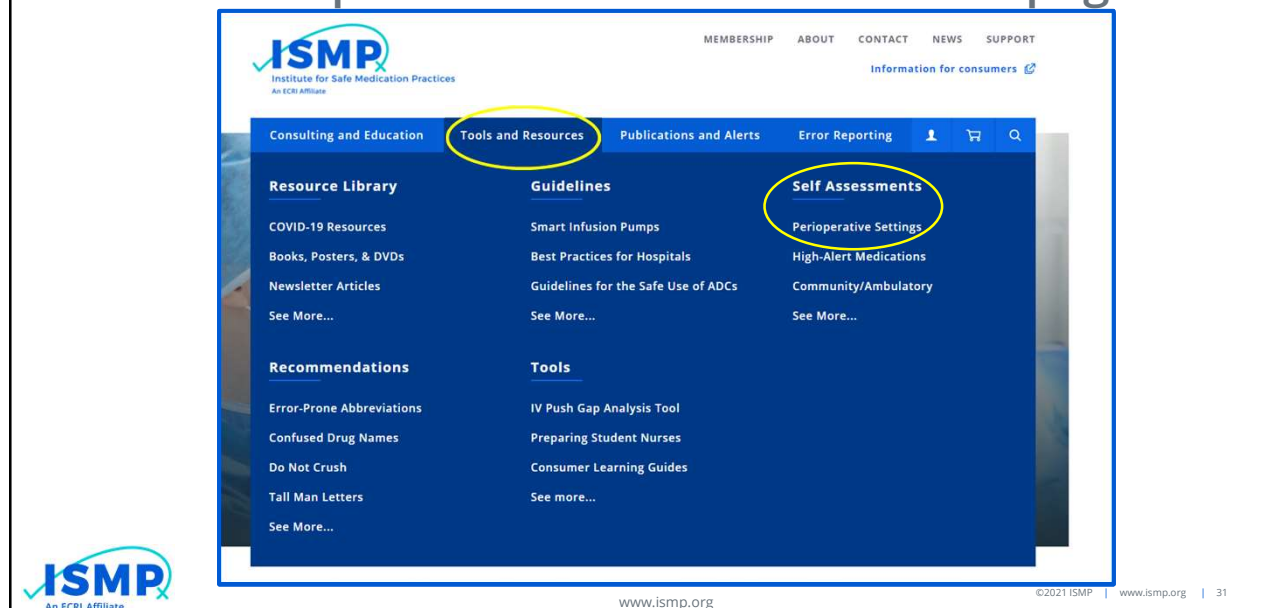


©2021 ISMP | www.ismp.org | 30

30

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

ISMP Perioperative Self-Assessment Webpage

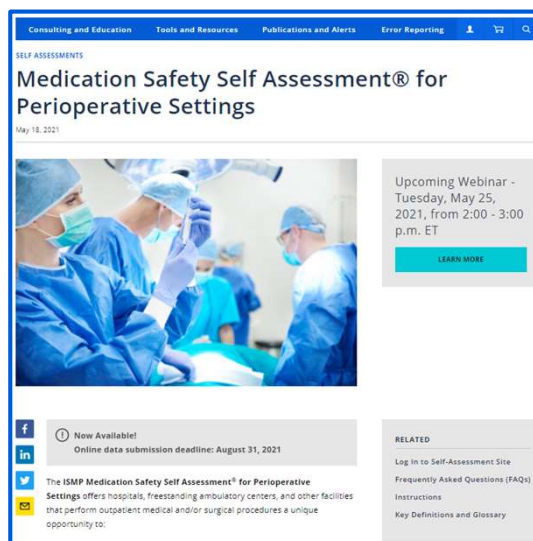


31

ISMP Perioperative Self-Assessment Webpage

— Provides access to:

- Online self-assessment site/form
(used for submitting responses to ISMP)
- Frequently Asked Questions (FAQs)
- Instructions
- Key Definitions and Glossary
- Full assessment PDF/Workbook
(must be logged in to ISMP website)
- Excel spreadsheet of the demographic questions and assessment items
(must be logged in to ISMP website)



32

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Access Full PDF/Workbook and Excel Spreadsheet

- Need to be logged in to the main ISMP website to access
- If you do not already have an account to the main ISMP website, it is free to create one
- Scroll to the bottom of the perioperative self-assessment webpage to access the documents (once signed in)



33

Self-Assessment PDF/Workbook

- Includes:
 - Invitation to participate
 - Funding source, security of information
 - Purpose, audience, scope
 - Advisory group, endorsing organizations
 - Key definitions/abbreviations
 - Complete instructions
 - Demographic questions
 - Self-assessment items
 - Glossary



©2021 ISMP | www.ismp.org | 34

34

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Online Self-Assessment Site/Form

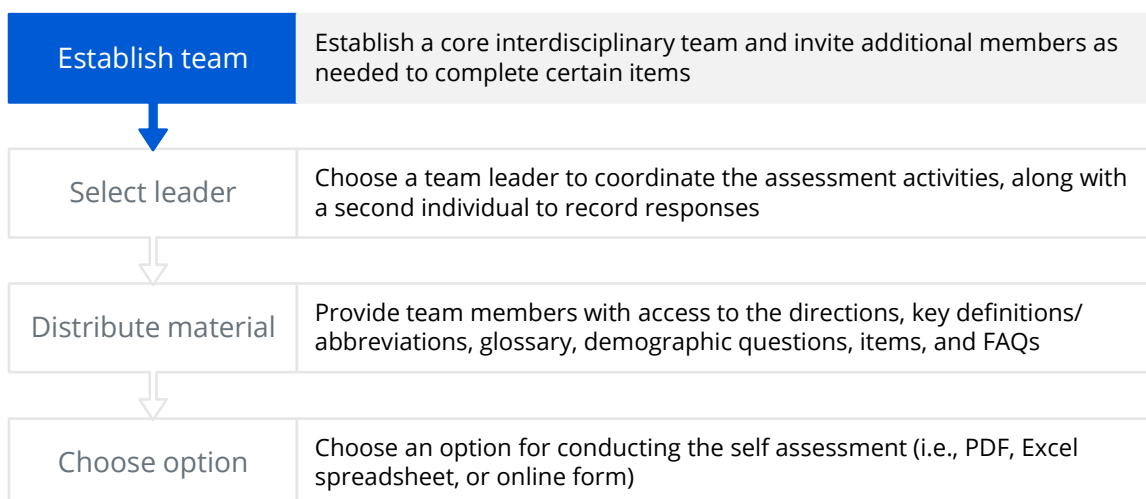
The screenshot shows the ISMP website interface. A blue box highlights the main content area, which includes a photo of surgeons, a webinar announcement for Tuesday, May 25, 2021, from 2:00 - 3:00 p.m. ET, and a 'LEARN MORE' button. A blue arrow points from this box to a separate 'RELATED' menu on the right. This menu lists: 'Log In to Self-Assessment Site' (circled in red), 'Frequently Asked Questions (FAQs)', 'Instructions', and 'Key Definitions and Glossary'. Below the main content, there is a 'Now Available!' announcement for the online data submission deadline of August 31, 2021, and a 'RELATED' section with links to the login site, FAQs, instructions, and glossary.



©2021 ISMP | www.ismp.org | 37

37

Instructions for Conducting the Assessment



©2021 ISMP | www.ismp.org | 38

38

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Core Interdisciplinary Team

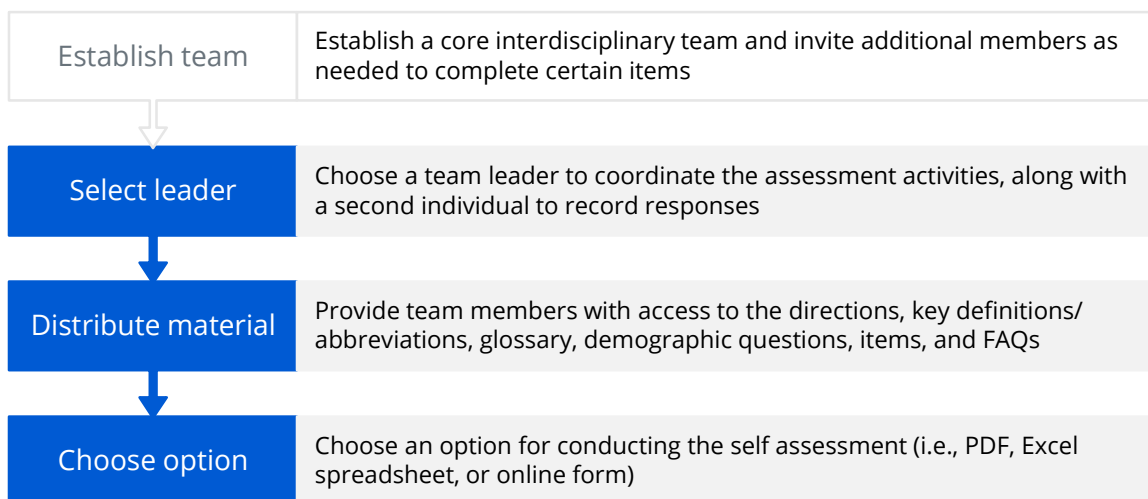
- **Establish a team consisting of, or similar to, the following:**
 - Senior facility leader/administrator and/or chief nurse leader
 - One or two surgeons/physicians who perform medical and/or surgical procedures under sedation
 - One or two anesthesia providers
 - One or two frontline perioperative nurses
- **If applicable, the core team might also include:**
 - Anesthesia personnel
 - Other frontline perioperative staff
 - Director of pharmacy or director of pharmacy operations
 - Staff pharmacist
 - Clinical information technology specialist
 - Medication safety officer or patient safety officer/manager
 - Risk management and quality improvement professional



©2021 ISMP | www.ismp.org | 39

39

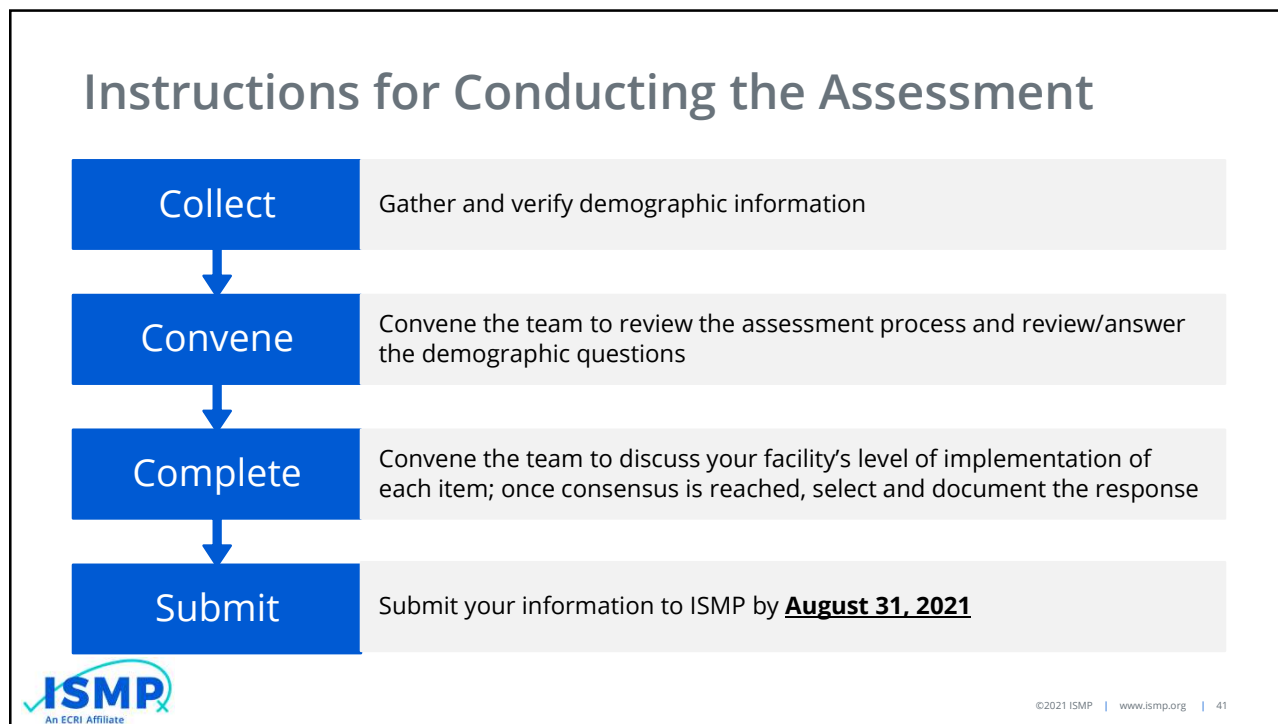
Instructions for Conducting the Assessment



©2021 ISMP | www.ismp.org | 40

40

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results



41



42

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Create Account

User account

[Create new account](#) [Log in](#)

Username *

Spaces are allowed; punctuation is not allowed except for periods, hyphens, apostrophes, and underscores.

E-mail address

A valid e-mail address. All e-mails from the system will be sent to this address. The e-mail address is not made public and will only be used if you wish to receive a new password or wish to receive certain news or notifications by e-mail.

Password *

Confirm password *

Provide a password for the new account in both fields.

Password strength:



©2021 ISMP | www.ismp.org | 43

43

Create Account (continued)

If you are part of a collaborative, please provide your collaborative code below. (optional)

If you are part of a participating health system or collaborative that plans to analyze its aggregate data internally, please enter your assigned health system- or collaborative-specific code when setting up your account. If you do not know your health system- or collaborative-specific code, please contact your health system or collaborative leader before submitting your information. If you are a health system or collaborative leader who would like to obtain a code, please contact: selfassess@ismp.org. If you are not part of a health system or collaborative that will be aggregating its results, please leave this prompt blank.

If you are part of more than one collaborative, please provide your additional collaborative codes below. (optional)

(Optional)

Please select the one category that best describes the facility completing this assessment. *

- ☐ **Hospital** that performs inpatient and/or outpatient medical and/or surgical procedures
- ☐ **Freestanding ambulatory surgery center (ASC)** not physically connected to a hospital, irrespective of ownership and licensure, including freestanding ASCs dedicated to specialty procedures (e.g., gastrointestinal/endoscopy procedures, interventional radiology, ophthalmic procedures, pain management procedures, fertility procedures)
- ☐ **Other facility** that performs outpatient medical and/or surgical procedures

If "Other facility," please specify:

[Create new account](#)

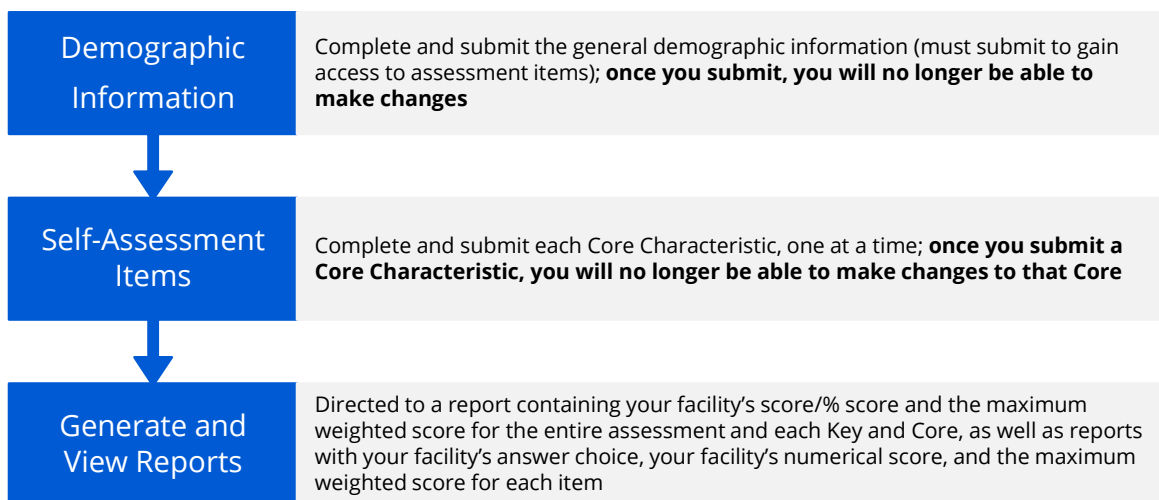


©2021 ISMP | www.ismp.org | 44

44

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Instructions for Submitting Information to ISMP



©2021 ISMP | www.ismp.org | 45

45

Provided Facility Results*

- For the entire assessment and each Key and Core
 - Facility's weighted score
 - Maximum weighted score
 - Facility's % of the maximum weighted score
- For each item
 - Facility's answer choice
 - Facility's weighted score
 - Maximum weighted score

ISMP Medication Safety Self Assessment® for Perioperative Settings Results

Overall Score for the Entire Self Assessment

YOUR FACILITY'S WEIGHTED SCORE	MAXIMUM WEIGHTED SCORE	YOUR FACILITY'S % OF THE MAXIMUM WEIGHTED SCORE
367	1464	25%

Key Element I: Patient Information

YOUR FACILITY'S WEIGHTED SCORE	MAXIMUM WEIGHTED SCORE	YOUR FACILITY'S % OF THE MAXIMUM WEIGHTED SCORE
40	128	31%

Core Characteristic 1

YOUR FACILITY'S WEIGHTED SCORE: 40

MAXIMUM WEIGHTED SCORE: 128

YOUR FACILITY'S % OF THE MAXIMUM WEIGHTED SCORE: 31%

[VIEW YOUR ANALYSIS](#)

*each facility that submits the entire assessment during the submission period will also receive access to comparative aggregate results near the beginning of the 4th quarter of 2021



©2021 ISMP | www.ismp.org | 46

46

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Core Characteristic

You got 40 of the maximum weighted score of 128.
Your % score was: 31 %

ITEM RESULTS

1. A computer-generated identification bracelet is verified for correctness using two unique patient identifiers and placed on the patient prior to medication administration and/or the medical and/or surgical procedure. Score 0 of 4

Your response:

☒ A. There has been no activity to implement this item.

☐ B. This item has been formally discussed and considered, but it has not been implemented.

☐ C. This item has been partially implemented for some or all patients, orders, drugs, or staff.

☐ D. This item is fully implemented for some patients, orders, drugs, or staff.

☐ E. This item is fully implemented for all patients, orders, drugs, or staff.

ISMP
An ECRI Affiliate

©2021 ISMP | www.ismp.org | 47

47

Collaboration with ISMP

- Contract (for a fee) with ISMP to establish a cohort of data for your collaborative group
- Work with ISMP to develop collaborative-specific codes and distribute to the facilities in your group
- Each facility will enter their assigned code in their account
 - Can be done during account creation or after submitting the entire assessment
- Following the submission deadline, ISMP will provide each collaborative group with an Excel spreadsheet of the aggregate data of their member facilities
- For more information, contact ISMP at: selfassess@ismp.org

ISMP
An ECRI Affiliate

©2021 ISMP | www.ismp.org | 48

48

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

How to Contact ISMP with Questions

- Email us at:
selfassess@ismp.org
- Submit a question using the “Contact Us” link on the ISMP website at:
www.ismp.org/contact (“Self-Assessments”)
- Submit a question using the “Need Help?” link in the online form/site (right)



©2021 ISMP | www.ismp.org | 49

49



Questions?

©2021 ISMP | www.ismp.org | 50

50

ISMP Medication Safety Self Assessment® for Perioperative Settings: How to Obtain the Most Valuable, Accurate, and Useful Results

Slide Citations

1. World Health Organization. WHO launches global effort to halve medication-related errors in 5 years. www.ismp.org/ext/279. Published 2017. Accessed July 30, 2018.
2. Beyea SC, Hicks RW, Becker SC. Medication errors in the OR--a secondary analysis of Medmarx. *AORN J*. 2003;77(1):122,125-9,132-4.
3. Boytim J, Ulrich B. Factors contributing to perioperative medication errors: a systematic literature review. *AORN J*. 2018;107(1):91-107.
4. Cooper JB, Newbower RS, Long CD, McPeckB. Preventable anesthesia mishaps: a study of human factors. 1978. *Qual Saf Health Care*. 2002;11(3):277-82.
5. Nanji KC, Patel A, Shaikh S, Seger DL, Bates DW. Evaluation of perioperative medication errors and adverse drug events. *Anesthesiology*. 2016;124(1):25-34.
6. Sakaguchi Y, Tokuda K, Yamaguchi K, Irita K. Incidence of anesthesia-related medication errors over a 15-year period in a university hospital. *Fukuoka Igaku Zasshi*. 2008;99(3):58-66.
7. Gariel C, Cogniat B, Desgranges FP, Chassard D, Bouvet L. Incidence, characteristics, and predictive factors for medication errors in paediatric anaesthesia: a prospective incident monitoring study. *Br J Anaesth*. 2018;120(3):563-70.
8. Webster CS, Merry AF, Larsson L, McGrath KA, Weller J. The frequency and nature of drug administration error during anaesthesia. *Anaesth Intensive Care*. 2001;29(5):494-500.



©2021 ISMP | www.ismp.org | 51